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No. 6739 P. 4/9

DRAWINGS

Formal Drawings

The indication by the Examiner in the recent Office Action that the formal drawings filed on November 2, 2001, were approved by the Draftsman is noted with appreciation.

REMARKS/ARGUMENTSStatus

No claims were added or canceled by this amendment. Independent claims 1 with claims 2-10 depending therefrom, and independent claim 11 with dependent claims 12-20 depending therefrom will remain for further consideration.

Claim History – 35 U.S.C. § 103

The Examiner rejected claims 1, 3, 11 and 13 under 35 U.S.C. § 103 over Sondur et al. in view of Obeda et al. The Examiner rejected claims 2 and 12 under 35 U.S.C. § 103 over Sondur et al. in view of Obeda et al. and in further view of Chaudhuri et al. The Examiner rejected claims 4-10 and 14-20 under 35 U.S.C. § 103 over Sondur et al. in view of Obeda et al. and in further view of Wilson et al. These rejection is respectfully traversed.

The current invention is to a method and apparatus for collecting topological information along a fiber optical communication network. The networks have various networking elements such as routers, switches, transport devices, optical amplifiers, add/drop multiplexers, transmitters, receivers, transceivers, end terminals, etc. The purpose of the network is to carry communications along the network including typically, voice, data and the like.

The patent to Sondur et al., on the other hand, is a computer network, which is a variety of computers connected by a mostly "dumb" network consisting of devices which allow "tree" ordered computers to communicate with each other. The software runs on the computers and not on the networking elements (the routers, splitters ("switches"), etc.). There is no identification whatsoever of how neighboring elements are found except for a

"facility to perform a device/entity" or can by "pre-definition." There is no indication that the "network" is used for any purpose other than to communicate between the topology-listed computers and devices connected in the closed loop. The entire Sondur et al. patent would be at best analogous to the "transport network 120" of the present invention and not the "optical communications network."

Additionally, there is no teaching that the actual communications network that is run by the networking elements of the current invention (as opposed to a back channel for connecting the elements) can have its topology collected by such a system. It would certainly destroy the current invention to force the use of personal computers in place of each of the wave division multiplexers and other network elements to create a system capable of collecting its own topology. The current invention is defined as an optical communication network and has hundreds of fiber optic port connections, which are nowhere shown in Sondur et al. Despite the similar term "networks," computer networks and optical communication networks are not analogous and programs that can easily be run on personal computers on a computer network to cull information between groups of computers would not easily or readily translate to optical network components such as routers, switches, transceivers and other devices. Software running on personal computers would have no teaching value whatsoever to the baser communication network components.

Obeda et al. shows topology discovery in an optical WDM network. However, there is no suggestion for combining an optical network discovery device with a computer network topology teaching absent impermissible hindsight in view of Applicant's invention. As discussed above, the arts are non-analogous and would have no reason to be combined and technically cannot be combined as there is no practical way to add the

personal computers of Sondur et al. into the network of Obeda et al. or vice versa. The Obeda network would not be compatible with the Ethernet of Sonder et al. as well.

Additionally, there is no interaction in Sondur et al. between the Protocol interface 204 and the user interface 102, and especially not as called out for in the claims. Claim 1 requires that the API collects information and make it available in a first format. The transport bridge then receives a second format request from a client and retrieves the proper first format data from the API and sends it back to the client in the second format.

In Sondur et al., this does not exist. The Applicant respectfully traverses the Examiner's finding that the "engine" is an application program interface as defined in the current invention, as there is no indication that the engine converts scripts into program language or the like to collect topology data. More likely, the "user interface" is more similar to the application program interface, though there is no indication that the user interface acts as a transport bridge by converting the requested topology information from a first format to a second format. And at best the "protocol interface" provides for interaction of the transmission control protocol (TCP) with the internet protocol (IP) to control data flow and not conversion of the data. Even if the engine were considered the API, there is no indication that the engine converts the "format" of the topology information. The engine may control the API of the protocol layer (col. 8, lines 26-35), however, this would merely be data transmission and routing control at best and not necessarily formatting or topology related, as protocol and format have quite diverse meanings. Additionally, there is no teaching that a client request (through such a device as the user interface) actually controls the engine in response to the request, nor does it cause the engine to convert the data. And since the examiner has defined the protocol interface as the transport bridge, there is certainly no indication that the protocol interface does

anything other than control data flow and/or routing (TCP and IP). The claims require that the "transport network bridge" convert the data. This is nowhere shown in Sondur et al. and is not cured by Obeda et al. Additionally, there is no suggestion for combining such a device in the invention of Obeda et al. as the computer network is not analogous to the optical communications network of Obeda et al., nor is there a teaching of how one would go about combining such diverse systems without undue trial and error or hindsight in view of the present application. For at least these reasons, the claims should be allowed over the art of record.

Claims 2 and 12 should be allowed for at least the same reasons as claims 1 and 10. Chaudhuri is relied upon as teaching Transaction Language 1. However, Chaudhuri does not provide a teaching for combining Sondur et al and Obeda, nor does it provide a teaching of a network bridge converting the topology information from a first format to a second format.

Claims 4-10 and 14-20 should also be allowed for at least the same reasons as claims 1 and 10. The article to Wilson does not provide a teaching for combining Sondur et al and Obeda, nor does it provide a teaching of a network bridge converting the topology information from a first format to a second format. Therefore it does not cure the deficiencies discussed above and the claims should be allowed over the art of record.

Summary

Applicants have made a diligent and bona fide effort to answer each and every ground for rejection or objection to the specification including the claims and to place the application in condition for final disposition. Reconsideration and further examination is respectfully requested, and for the foregoing reasons, Applicant respectfully submits that this application is in condition to be passed to issue and such action is earnestly solicited. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Robert N. Blackmon, Applicants' Attorney at 703-684-5633 to satisfactorily conclude the prosecution of this application.

Dated: March 14, 2006

Respectfully submitted,



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